

Monitoring Data Record

Project Title: I-540 Northern Wake Expressway (R-2000AB) COE Action ID: 200021863

Stream Name: UT to Kit Creek DWQ Number: 030918

City, County and other Location Information: Wake County, Site 6 (Sta.10+41 to 12+76 YRPA-)

Date Construction Completed: March 2005

Monitoring Year: (2) of 5

Ecoregion: _____ 8 digit HUC unit 03030002

USGS Quad Name and Coordinates: _____

Rosgen Classification: _____

Length of Project: 1,299' Urban or Rural: Rural Watershed Size: _____

Monitoring DATA collected by: M. Green and J. Young Date: 8/9/07

Applicant Information:

Name: NCDOT Roadside Environmental Unit

Address: 1425 Rock Quarry Road Raleigh, NC 27610

Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us

Consultant Information:

Name: _____

Address: _____

Telephone Number: _____ Email address: _____

Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level 1 ~~2~~ ~~3~~

Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: NCDOT shall perform the following components of Level I monitoring twice each year for the 5 year monitoring period (summer and winter): Reference photos, plant survival, and visual inspection of channel stability. If less than two bankfull events occur during the first 5 years, NCDOT shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the 5 year monitoring period, the USACE, in consultation with resource agencies, may determine that further monitoring is not required.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site:

5 photo point locations, 2 photos taken at each location

Dates reference photos have been taken at this site: 9/12/06, 3/14/07, 8/9/07

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: _____

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:_____

ADDITIONAL COMMENTS: Vegetation noted onsite at the stream relocation at permitted Site 6 includes green ash, black willow, sycamore, tulip poplar, tag alder, sweetgum, ragweed, woolgrass, cattails, fennel, *Juncus* sp., lespedeza, and various grasses.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

The stream is stabilized for the Year 2 summer evaluation. The bank erosion on the left bank at the inlet of the box culvert located at approx. Sta. 12+70 that was noted last during the last monitoring visit has been stabilized with rip rap with the Regulatory Agencies approval (last photo shows rip rap placed along left bank). The cross vane at approx. Sta. 10+50 that was noted during the last monitoring evaluation as being a destabilizing structure has been removed from the channel. This cross vane was causing the left bank to erode. NCDOT with the Regulatory Agencies approval felt that it was best to remove this cross vane due to the triassic rock located along the channel that would have made it impossible to re-stabilize this cross vane. The removal of this cross vane should not result in degradation of the relocated channel. There was evidence that a bankfull event had occurred since the last monitoring evaluation at this stream relocation. NCDOT will continue to monitor this stream relocation.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

UT Kit Creek

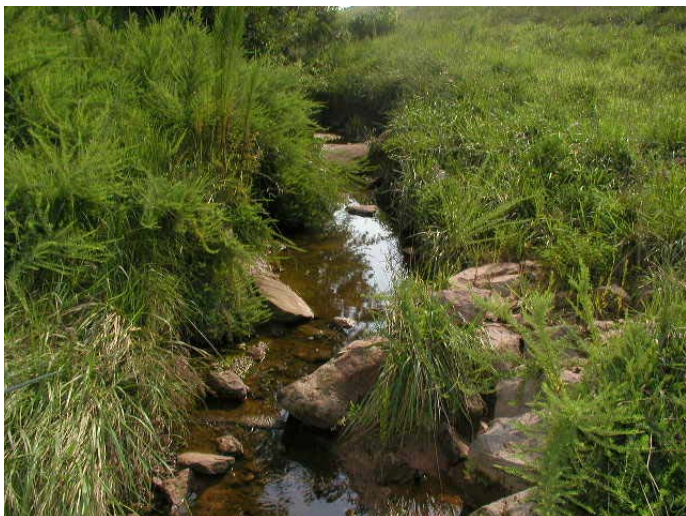


Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)



Photo Point #2 (Downstream)



Photo Point #3 (Upstream)



Photo Point #3 (Downstream)

UT Kit Creek



Photo Point #4 (Upstream)



Photo Point #4 (Downstream)



Photo Point #5 (Upstream)

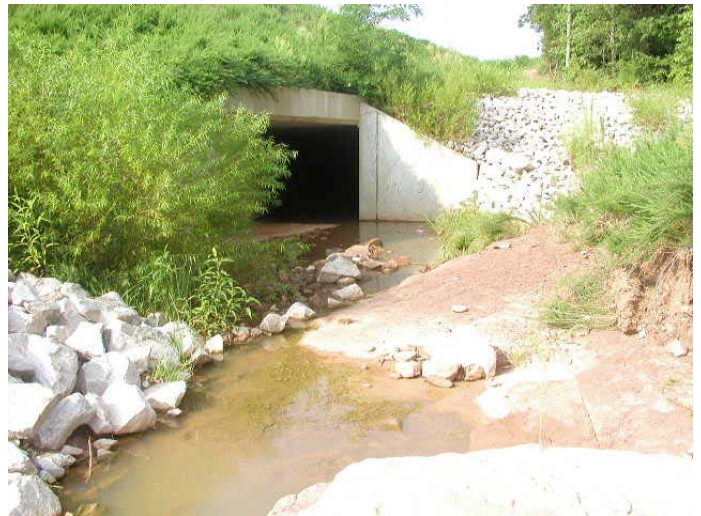


Photo Point #5 (Downstream)



Rip rap placed along left bank at inlet of box culvert

Year 2 Summer – August 2007